

5 FUNCTIONALIZED PERIODIC MESOPOROUS MATERIALS,
 THEIR SYNTHESIS AND USE

Absract of the Disclosure

10 A functionalized porous crystalline material is disclosed exhibiting
 an X-ray diffraction pattern with at least one peak at a position greater than
 about 1.8 nm d-spacing with a relative intensity of 100. The crystalline material
 comprises a framework including metal atoms, oxygen atoms and at least one
 organic group bonded between at least two of said metal atoms so as to be
15 integral with said framework, and wherein said organic group has at least one
 sulfonate moiety bonded thereto.